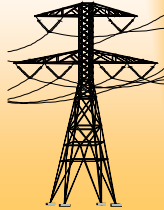


Federal Utility Partnership Working Group

The Energy Crises in California
William L. Bryan
Director of Government/ Institutions/Water
San Diego, CA
March 7, 2001



Overview

- ◆ Factors leading to the California energy crises
- ◆ Impacts to utilities and reliability
- ◆ Recent Government and Legislative actions
- ◆ What should Energy Managers do

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Key Factors Leading To Crisis

- ◆ Divestiture of utility generation
 - Transfer of control from State to Federal jurisdiction
- ◆ Reliance on the spot market
 - Utilities required to buy from PX and ISO
 - Bilateral contracts restricted by CPUC until it was too late
- ◆ Double digit load growth in California
- ◆ Record high gas prices
- ◆ Exercise of market power by non-utility generators
- ◆ Inaction by FERC
 - Despite deeming prices “unjust and unreasonable,” FERC fails to allow meaningful price controls
- ◆ Late response by CPUC and Governor Davis
 - Sustained high prices
 - Refusal to end rate freeze and adopt new stabilized rates
 - SCE and PG&E on the edge of bankruptcy

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Generation Supply Issues

- ◆ Uncertain new generation additions by this summer
- ◆ Power imports continue to decrease
- ◆ California generators are selling out of state
- ◆ Higher forced outage levels
- ◆ Generator outages planned for NOx emissions control modifications
- ◆ Hydro energy limitations
- ◆ Natural gas supply uncertainty
- ◆ State procured long-term supply contracts

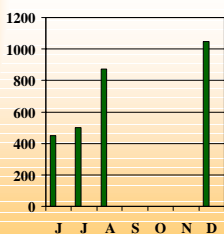
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California Generation Additions

2001 Generation Additions



- ◆ 1,821 MW Planned by Summer 2001
- ◆ ISO Summer Reliability Contracts
 - 2,045 MW Targeted
 - 1,281 MW Contracts Signed (29 Projects)
 - 700 MW Expected
- ◆ Merchant Generators

– Huntington Beach	6/01	450 MW
– Los Medanos	7/01	500 MW
– Sutter	8/01	500 MW
– Sunrise	8/01	320 MW
– Golden Gate	8/01	51 MW
– La Paloma	12/01	1048 MW

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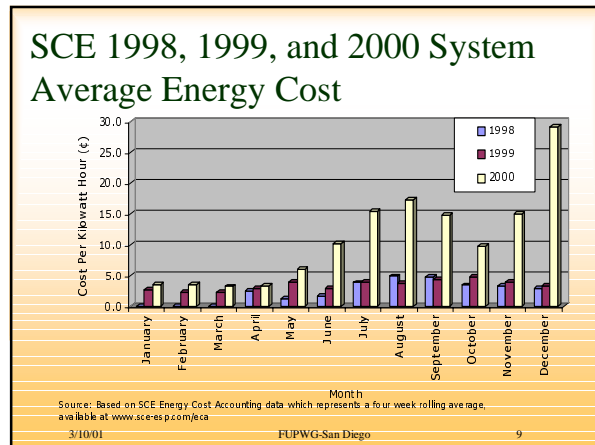
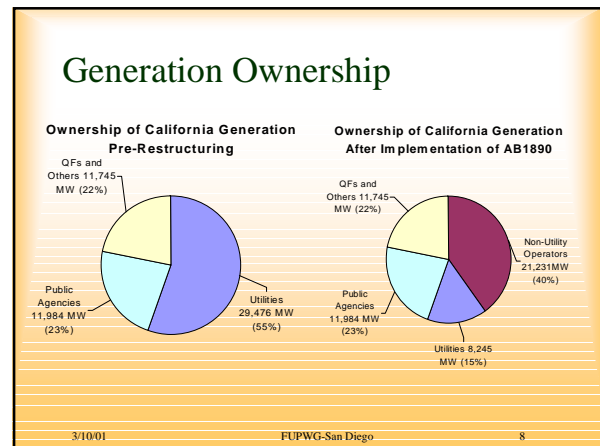
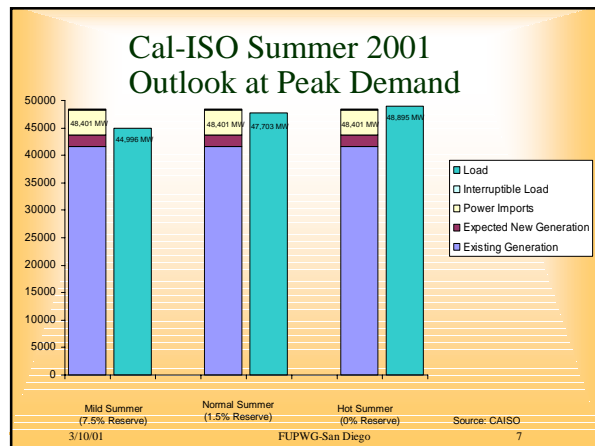
Governor's Actions to Expedite Power Plant Development

- ◆ Goals: 5,000 MW by 7/1/01
5,000 MW by 7/1/02
- ◆ Financial bonus for new power plants on line by 7/1/01 (\$10,000 per MW)
- ◆ Shorter CEC approval process
 - 21 days for small “peaking” plants
 - 4 months for large plants
- ◆ ARB to create bank of pollution credits with \$100 million state funding and generation funding
- ◆ New State “permitting czar” to fast track noncontroversial projects
- ◆ New State “energy construction czar”

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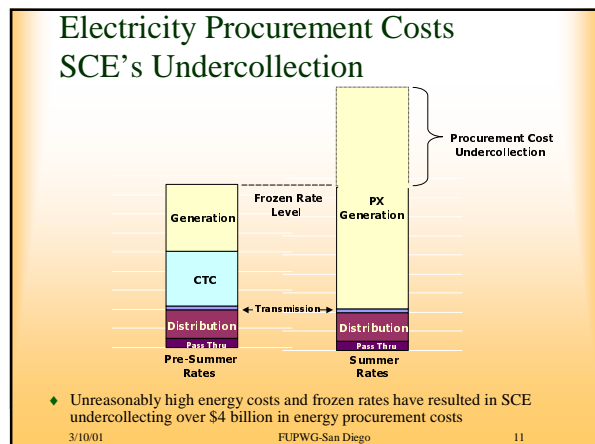
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Utilities Have Born the Burden of High Wholesale Prices

- ◆ SCE's cost to procure power during the on-peak period averaged 21.9¢ /kWh, while retail prices were capped at approximately 6.5¢ /kWh
- ◆ SCE's under collection is approximately \$4 billion
- ◆ Debt rating has sunk to "Junk Bond" status
- ◆ Federal customers were protected by the rate freeze

*Source: Based on SCE Energy Cost Accounting data which represents a four week rolling average, available at www.sce-es.com/jeca



FERC Findings and Proposals to Fix the California Market

Finding

- ◆ Prices charged by generators and marketers are unjust and unreasonable

Proposals

- ◆ IOUs no longer required to buy from or sell into the California Power Exchange
- ◆ Implementation of a temporary two-year "soft cap" on generation sales set at \$150/mWh
- ◆ Deferred consideration of retroactive refund issues
- ◆ Market participants must schedule 95% of all transactions into the day-ahead markets
- ◆ Restructure Cal-ISO Board of Directors

Principles For Market Recovery

- ◆ New generation supplies and adequate transmission
- ◆ Long term bilateral contracts for the majority of the power used in the State
- ◆ Stable, cost-based pricing for customers
- ◆ Conservation and energy efficiency
- ◆ Comprehensive legislation

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Rotating Outages are a Possibility This Summer

- ◆ Essential customers are not normally affected
- ◆ SCE is given 15 minutes to drop load
- ◆ Interrupted circuits vary through-out the service territory
- ◆ The ISO is forecasting shortages of supply this summer

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Recent Government Actions

- ◆ Governor's Executive orders
 - January 17, 2001 authorizes California Department of Water Resources (CDWR) to buy power on the spot market
 - February 01, 2001 implements emergency conservation measures
 - February 2 & 5 - seized SCE and PGE bilateral contracts from the PX to preserve low cost power for California consumers
 - February 8 - Streamlined permitting process for new generation
- ◆ Significant legislation
 - ABx1-1 - Authorizes approximately \$10 billion bond issue for DWR to purchase power through long term contracts
 - ABx1-5 - Restructures governing boards of the ISO
 - SBx1-6 - Requires SCE, PG&E, and SDG&E to retain their existing generation assets
- ◆ Federal Government
 - February 07, 2001 - Department of Energy's order to require gas and electric power producers to sell to California expired.

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Governor's Framework for Restoration of Utility Solvency

- ◆ The Governor's framework (continued):
 - EIX to transfer approximately \$420 million in 2000 taxes to SCE
 - Governor to support legislation which ensures that a dedicated rate component is set at a level which will allow Edison to issue bonds to recover a substantial portion of the its energy procurement debt
 - Governor to request California Public Utilities Commission to support the creditworthiness of SCE
 - Edison will agree to dismiss its lawsuit in federal court against the CPUC

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Governor's Framework for Restoration of Utility Solvency

- ◆ On February 23, 2001, the Governor announced the framework of a plan to restore utility solvency
- ◆ The Governor's framework includes:
 - Sale of SCE's transmission system to the State of California
 - SCE to provide electricity at cost-based rates for its retained generation for ten years
 - Edison International's commitment to provide the cost-based rates for at least ten years for the output of a non-regulated power project under construction to the State of California
 - Commitments, through conservation easements, watershed property owned by Edison

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SCE's Response to Governor's Announcement

- ◆ Feb. 23, 2001, SCE confirmed it has reached a preliminary agreement with the governor
- ◆ The company's transmission grid is included,
- ◆ SCE will be protected from further procurement liability
- ◆ An agreement is not yet final
- ◆ The approval of important details in support of the principles and approval by the company's board of directors is required
- ◆ SCE followed this course of action because it is in the interest of our ratepayers, creditors, shareholders, and employees

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Conservation

- SCE has several energy conservation and load management programs
- These efforts have been identified as having enabled the State of California to avert firm load interruptions on multiple occasions
- Governor Gray Davis has recently expanded many conservation programs (approximately \$800 million in funding) targeting residential, commercial, industrial, and agricultural customers
 - We encourage you to work with your assigned SCE account management team

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The Broken Power Market's Implications for Federal Customers

- ◆ Temporary Reduction in services
 - No new project financing
- ◆ Rate increases
- ◆ Suspension of Direct Access

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What Should Energy Managers be Doing?

- ◆ Adjust consumption to price signals as much as possible
- ◆ Participate in Utility and/or ISO sponsored load management programs:
 - Demand Responsiveness
 - Voluntary Power Reduction Credit
 - Other Programs may become available this summer
- ◆ Continue working with utilities to develop and implement DSM programs

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Helpful Websites

- ◆ Southern California Edison
 - www.sce.com
- ◆ California ISO
 - www.caiso.com
- ◆ California Power Exchange
 - www.calpx.com
- ◆ California Public Utility Commission
 - www.cpuc.ca.gov
- ◆ California Energy Commission
 - www.energy.ca.gov

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